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ABSTRACT

A sports racket, for tennis and the like sports, has an elongated handle attached to a head having a racket face, which is spanned by a uniform string structure. The head has four sides, forming a non-elliptical shape, in which the opposite sides are substantially parallel.

Longitudinal strings, all of which are substantially identical in length and run essentially parallel to each other, and transversal strings, all of which are substantially identical in length and run essentially parallel to each other and perpendicular to the longitudinal axis, span the racket face. The racket has a larger racket face than conventional rackets, while maintaining the length and weight measurements of conventional rackets, resulting in a very large sweet spot and more good hits. The racket has maximally long strings at all points on the racket face and strings substantially identical in length at all points on the racket face resulting in a uniformity of response for off-center hits, an increase in the ball rebound speed, a decrease in angular deflection for off-center hits, and the ability to set the tension of the strings such that they vibrate with the same frequency. The racket has a greater moment of inertia than conventional rackets, resulting in reduced racket rotation and a reduction of injuries to players, such as "tennis elbow".

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